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U.S. Patent Application
Attorney Docket No.: ELRP:101_US_

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: **MANCUSO, Anthony J. et al.** Examiner: **Jillions, John M.**

U.S. Patent Application No.: **09/954,766**

Group Art Unit: **3654**

For: **COIL REEL HOLD-DOWN DEVICE**

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BRIEF ON APPEAL
(37 C.F.R. §1.192)

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Honorable Sir:

Applicants respectfully appeal the decision of the Primary Examiner to finally reject Claims 1-12, as set forth in the Office Action of June 12, 2003.

REAL PARTY IN INTEREST

The Real Party in Interest in this matter is Elrae Industries, Inc., assignee.

RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences pertaining to this matter.

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STATUS OF CLAIMS

Claims 1-12 are currently pending in this application. The Primary Examiner issued a Final Rejection of these claims on June 12, 2003. Claims 1-12 are the subject of this appeal.

STATUS OF AMENDMENTS

An Amendment to Claim 1 and a Request for Reconsideration was filed on April 21, 2002 in response to the first Office Action of January 21, 2003. This amendment was submitted and entered prior to the issuance of a Final Rejection.

SUMMARY OF THE INVENTION

The present invention relates to a free-standing coil reel hold-down device which comprises a base plate operatively arranged to be secured to a floor; a snubber arm pivotably mounted to the base plate and arranged for pivoting rotation about a pivot point, the snubber arm including a first section and a second section disposed at an obtuse angle with respect to one another; and, a stand-alone means for effecting a pivoting movement of the snubber arm relative to the base plate.

ISSUES PRESENTED FOR REVIEW

1. Whether Claims 1-3, 6 and 10 are novel under 35 U.S.C. §102(b) and therefore patentable over United States Patent No. 5,330,119 (Rodriguez *et al.*)?
2. Whether Claims 4 and 5 are non-obvious under 35 U.S.C. §103(a) to a person having ordinary skill in the art at the time the invention was made and therefore patentable over United States Patent No. 5,330,119 (Rodriguez *et al.*) in view of United States Patent Nos. 4,589,605 (Orii)?
3. Whether Claims 7-9 and 11-12 are non-obvious under 35 U.S.C. §103(a) to a person having

ordinary skill in the art at the time the invention was made and therefore patentable over United States Patent No. 5,330,119 (Rodriguez *et al.*)?

GROUPING OF CLAIMS

Applicants respectfully submit that Claims 1-12 do not stand or fall together. While Claim 1 is the sole independent claim, the dependent claims have independent patentable significance over and above Claim 1.

ARGUMENT

1. The Rejection of Claim 1 under 35 U.S.C. §102(b)

a.) Summary of the Rejection:

The Examiner rejected Claims 1-3, 6 and 10 under 35 U.S.C. §102(b) as being anticipated by Rodriguez *et al.* (USPN 5,330,119).

b.) The Reference cited by The Examiner:

For purposes of providing background, Applicants briefly discuss the Rodriguez *et al.* reference cited by the Examiner. Rodriguez *et al.* describes a snubber mechanism in Figs. 1 and 9 and Col. 10, lines 1-17.

FIGS. 1 and 9 illustrate a snubber mechanism 266, **mounted adjacent** the arbor 26 containing the coil 10'. The snubber mechanism 266 provides means for preventing the uncontrolled uncoiling of the coil **when in the feeding position**.

The snubber 266 more specifically comprises a base frame 268 anchored to the surface 42, a bellcrank arm 270, a cylindrical pressure pad 272, and a linear actuator 274. The bellcrank arm 270 is pivotally mounted at a **point intermediate its ends** on a flange 276 extending upwardly from and forming a part of frame 268. The linear actuator 274 is operably mounted between an anchor point 278 on the frame 268 and the lower end of the arm 270. The pressure pad 272 is positioned with its longitudinal axis parallel to the axis of the arbor 26, and is adapted to engage the outer periphery of the coil 10 mounted on the arbor 26 in the feeding position. (emphasis added)

c.) The Present Invention :

The key structural elements of the present invention are described in Claim 1. Claim 1 teaches a free-standing coil reel hold-down device, comprising:

a base plate operatively arranged to be secured to a floor;

a snubber arm pivotably mounted to said base plate and arranged for pivoting rotation about a pivot point, said snubber arm including a first section and a second section disposed at an obtuse angle with respect to one another; and,

a stand-alone means for effecting a pivoting movement of said snubber arm relative to said base plate.

d.) Arguments: The reference cited by the Primary Examiner does not contain each and every element of the present invention.

An invention is anticipated only if each and every element as set forth in the claims is found, either expressly or inherently, in a single prior art reference. As elucidated below, Rodriguez *et al.* fails to teach several elements of the present invention.

i.) Rodriguez Does Not Disclose a "Snubber Arm Including a First Section and a Second Section" as Required by Claim 1.

Claim 1 specifically recites the element of a "snubber arm including a first section and a second section". Rodriguez *et al.* does not disclose this element. The Rodriguez *et al.* device described above features a one-piece bellcrank arm 270. This one-piece construction makes it impossible to have an obtuse angle in the arm. The relatively short length of the one-piece bellcrank

arm results in the snubber contacting the coil on the side (i.e. “mounted adjacent”). Since the coil is held down from the side rather than the top, as the coil decreases in size, the Rodriguez *et al.* arm loses its functionality. Furthermore, if the coil reel has a small diameter, the short Rodriguez *et al.* arm cannot hold it down. This lack of flexibility of the Rodriguez *et al.* arm is emphasized by the requirement that the coil be in a specific feeding position for proper functioning. Therefore, Rodriguez *et al.* does not anticipate Claim 1, or any of its trailing dependent claims, under 35 U.S.C. §102.

ii.) Rodriguez Does Not Disclose a “First Section and a Second Section Disposed at an Obtuse Angle with Respect to One Another” as Required by Claim 1.

Claim 1 specifically recites the element of a snubber arm with “a first section and a second section disposed at an **obtuse angle** with respect to one another.” Rodriguez *et al.* does not disclose this element. The arm in the present invention requires two pieces so as to provide an obtuse angle in the pivoting arm. As discussed above, having an obtuse angle in the two-piece arm is functionally advantageous as it regulates the arm and makes it adaptable for small and large diameter coils. Therefore, Rodriguez *et al.* does not anticipate Claim 1, or any of its trailing dependent claims, under 35 U.S.C. §102.

iii.) Rodriguez Does Not Disclose “Effecting a Pivoting Movement of Said Snubber Arm Relative to said Base Plate” as Required by Claim 1.

Claim 1 specifically recites the element of “effecting a pivoting movement of said snubber arm relative to said base plate.” This pivoting arrangement, combined with the angled arm allows the

present invention to contact a coil from the top, rather than the side. Rodriguez does not disclose this element. Instead “the bellcrank arm 270 is pivotally mounted at a **point intermediate its ends** on a flange 276.” Thus, the pivot point for Rodriguez *et al.* is far above the base and therefore less stable and less effective as a hold-down device. As such, it is unnecessarily complex and cannot be readily adapted for existing apparatus. Therefore, Rodriguez *et al.* does not anticipate Claim 1, or any of its trailing dependent claims, under 35 U.S.C. §102.

iv.) Rodriguez Does Not Disclose “A Stand-Alone Means For Effecting a Pivoting Movement” as Required by Claim 1.

The Primary Examiner states that Fig. 9 of Rodriguez *et al.* shows a device that is “stand alone”. Applicants respectfully traverse by noting that Rodriguez *et al.* requires that “a snubber mechanism 266, [be] **mounted** adjacent the arbor 26 containing the coil 10” (emphasis added, column 10, lines 1-2). Thus, neither the entire Rodriguez *et al.* reference nor specifically, Figure 9 of Rodriguez *et al.*, teaches a free-standing coil reel hold-down device which includes a stand-alone means for effecting a pivoting movement of the snubber arm relative to the base plate. Instead, since the Rodriguez *et al.* apparatus was designed to simultaneously handle multiple coils, it features an integrated “at least two” coil support means (see Claim 1 of Rodriguez *et al.*), and holding means associated with each coil support (i.e. at least two holding means) which must be necessarily components of a large, complex, expensive feeding apparatus which requires electrical power to function. Thus, the Rodriguez *et al.* at least two holding means cannot be used as a separate, stand-alone coil reel hold-down device that can be retrofitted to existing coil reel feeding apparatus. As

part of a larger machine, Rodriguez's at least two holding means cannot be operated independently or transported easily. These additional functional benefits derived from the structural features of the present invention are easily apparent in the Exhibit 1 demonstration. Without the present invention, it is impossible for any existing, large, complex and expensive machinery which uses coil reels to safely and inexpensively reduce the effects of unbounding.

v.) The Structural Elements of Claim 1 which Provide Functional Advantages Over the Rodriguez Device

Coils of varying size can be held down by the present invention **because of the obtuse angle in the two-piece snubber arm**. As shown in Figs. 8A and 8B, the presence of the obtuse angle results in the coil reel being held down **from the top**. Because the point of contact is at the top of the reel, small reels can be held down effectively. Furthermore, when a large diameter coil reel is fed continuously into a larger apparatus, the reel gradually decreases in diameter. Again, the fact that the reel is held down from the top means that there is no possibility of the snubber arm falling off the reel as it decreases in diameter. These features of the present invention are further demonstrated by the enclosed Exhibit 1, a CD-ROM entitled "CoilSafe 2000 Distributor Demo". The functional benefits provided by the structural limitations of the present invention should be readily apparent.

2. The Rejection of Claims 2, 3, 6 and 10 under 35 U.S.C. §102(b)

- a.) Summary of the Rejection: As discussed above.
- b.) The References cited by The Examiner: Rodriguez was discussed above.
- c.) The Present Invention:

Elements of the present invention have been discussed above as relating to independent Claim 1 from which Claims 2, 3, 6 and 10 ultimately depend. However, each of these dependent claims has independent patentable significance over and above Claim 1. Specifically, Claim 2 teaches that the first section of the snubber arm may be disposed proximate to the base plate. Claim 3 features the additional element of a snubber device mounted to the second section of the snubber arm. Claim 6 teaches that the means for effecting a pivoting movement of the snubber arm comprises a cylinder. Claim 10 teaches that the first section has a first length and the second section has a second length wherein the first length is approximately three times the second length.

d.) Arguments: In addition to the lack of anticipation of all of the elements of Claim 1, Rodriguez does not teach the additional limitations of Claims 2, 3, 6 and 10. Specifically, Rodriguez features a **one-piece** bellcrank arm, 270, to which a cylindrical pressure pad, 272, is mounted. There is no teaching in Rodriguez regarding the length of this arm.

3. The Rejection of Claims 4 and 5 under 35 U.S.C. §103(a)

a.) Summary of the Rejection:

The Primary Examiner rejected Claims 4 and 5 under 35 U.S.C. §103(a) as being obvious and unpatentable over Rodriguez *et al.* (USPN 5,330,119) in view of Orii (USPN 4,589,605).

b.) The References cited by The Examiner: Rodriguez was discussed above.

Orii: Orii teaches an apparatus for looping coiled material comprising: an uncoiler mechanism for holding a coiled portion of the material and for unwinding the coiled material by rotating the coiled portion of the material about a horizontal axis; and a loop guide mechanism disposed alongside

said uncoiler mechanism for guiding the material unwound by the uncoiler mechanism helically from the coiled portion in a direction perpendicular to the direction of feed..." (See Claim 1 of Orii).

c.) The Present Invention:

Elements of the present invention have been discussed above as relating to independent Claim 1 from which Claims 4 and 5 ultimately depend. However, each of these claims has independent patentable significance over and above Claim 1. Claim 4 and 5 teach that the snubber device may comprise a wheel or a roller, respectively.

d.) Arguments:

i.) The combination/modification propounded by the Primary Examiner does not teach or suggest all of the claim limitations of the present invention.

"To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one having ordinary skill in the art, to modify the reference or combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or the references when combined) must teach or suggest **all** the claim limitations." MPEP §2142, citing, *In re Vaeck*, 20 U.S.P.Q.2d 1438 (Fed. Cir. 1991).

The Primary Examiner indicates that the substitution of a roller or a wheel in lieu of the sliding snubber member of Rodriguez *et al.* would have been an obvious substitution in view of the Orii teaching that a snubber member could be in the form of a roller. However, even if Orii teaches a snubber in the form of a roller, Orii cannot cure the lack of teachings in Rodriguez *et al.* regarding a

stand-alone bi-sectional snubber arm with an obtuse angle that pivots at the base. Thus, the Primary Examiner has failed to establish a *prima facie* case for obviousness for the rejection of Claims 4 and 5 since neither Rodriguez alone nor in combination with Orie arrives at all the limitations of these claims.

ii.) The references cited by the Primary Examiner teach away from the present invention.

In addition to failing to teach all of the limitations of Claims 4 and 5, Rodriguez teaches away from the present invention, requiring a plurality of large diameter coils that must be placed in a fixed feeding position. Similarly, the Orie device is targeted to actively **uncoiling** a reel which teaches away from the coil reel **hold down** device of the present invention. This uncoiler also lacks a bi-sectional arm with an obtuse angle pivoting relative to a base plate. Furthermore, these references relate to “specific use” hold-down devices that are an inseparable, integral component of more complex/expensive apparatuses, rather than the unique “stand-alone” and readily-adaptable apparatus of the instant invention. Finally, there is no motivation, teaching or suggestion for one skilled in the art to combine the snubber mechanism teachings of Rodriguez with the Orie uncoiler to arrive at all the limitations in Claims 4 and 5.

iii.) Secondary factors and objective evidence favors a finding that Claims 4 and 5 are nonobvious.

As indicated in *Hybritech, Inc. v. Monoclonal Antibodies, Inc.*, 231 U.S.P.Q. 81, 85 (Fed. Cir. 1990), “[o]bjective evidence...must be considered *before* a conclusion of obviousness...”

Applicants have previously provided an Affidavit under 37 CFR 1.132 showing secondary evidence of commercial success (MPEP 716 *et seq.*). This includes a redacted sales report (previous Exhibit A), which is a true and accurate report of the sales of the coil reel hold-down device at issue. This commercial success was due to the merits of the invention. In addition, Applicants respectfully assert that other objective indicia such as failure of others to solve the problem addressed by the invention, and the existence of a long-felt need for the invention also support a determination of non-obviousness. Thus, the aforementioned objective evidence necessitates a conclusion that the invention is NOT obvious.

4. The Rejection of Claims 7-9 and 11-12 under 35 U.S.C. §103(a)

a.) Summary of the Rejection:

The Primary Examiner rejected Claims 7-9 and 11-12 under 35 U.S.C. §103(a) as being obvious and unpatentable over Rodriguez *et al.* (USPN 5,330,119).

b.) The References cited by The Examiner:

Rodriguez was discussed above.

c.) The Present Invention:

Elements of the present invention have been discussed above as relating to independent Claim 1 from which Claims 7-9 and 11-12 ultimately depend. However, each of these dependent claims has independent patentable significance over and above Claim 1. Claim 7 and 8 teach that the cylinder may be pneumatically controlled or hydraulically controlled, respectively. Claim 9 and 11 explain that the obtuse angle is approximately 120 degrees or in a range of about 100 to 130 degrees, respectively.

Finally, Claim 12 discloses that the snubber arm is arranged to pivot about the pivot point through an angle in a range of approximately 25 to 40 degrees.

d.) Arguments:

i.) The combination/modification propounded by the Primary Examiner does not teach or suggest all of the claim limitations of the present invention.

As noted above, a *prima facie* case for obviousness requires that the prior art reference must teach or suggest all the claim limitations. Claims 7-9 and 11-12 all ultimately depend from Claim 1 which has numerous features not taught by Rodriguez *et al.* Orii fails to compensate for the inadequacies of the Rodriguez reference. Even if Orii teaches a wheel, the Orii device is missing a two-piece snubber arm with an obtuse angle with the pivot point proximate to the base plate. Thus, Orii cannot cure the defects of Rodriguez. Applicants are particularly distressed that the Primary Examiner has failed to appreciate the significance of the particular angle between sections of the arm and the particular amount of pivoting movement. Contrary to the Primary Examiner's view that these features are immaterial, Applicants claims emphasize that both the angle between sections of the arm and the amount of pivoting movement are important limitations to the operation of the present invention. This is stressed by the inclusion of particular limitations regarding the range for the obtuse angle in Claims 9 and 11 and the pivoting angle in Claim 12.

ii.) The reference cited by the Primary Examiner considered individually or collectively with information known to one of ordinary skill in the art, does not contain sufficient teaching, suggestion or motivation to combine/modify the references to create the present invention.

When a rejection depends on a combination of prior art references, there must be some teaching, suggestion, or motivation to combine the references and the teachings of the references can be combined only if there is some suggestion or incentive to do so. *In Re Lee*, 61 U.S.P.Q.2d 1430 (Fed. Cir. 2002), citing *In re Fine*. Additionally, the mere fact that references can be combined or modified does not render the resultant combination obvious unless the prior art also suggests the desirability of the combination. *In re Mills* 16 U.S.P.Q.2d 1430.

In the present case, none of the prior art references cited by the Primary Examiner contain an explicit or implicit teaching, suggestion, or motivation to create the subject invention and none teach, suggest, or motivate one to combine/modify their respective teachings with others to create the subject invention. The Rodriguez device teaches a one-piece bellcrank arm without an obtuse angle. There is no teaching, suggestion or motivation to modify the bellcrank arm into a two-piece pivoting arm with an obtuse angle.

Furthermore, as previously stated, Rodriguez teaches away from the present invention and relates to “specific use” hold-down devices that are an inseparable, integral component of more complex/expensive apparatuses, rather than the unique “stand-alone” and readily-adaptable apparatus of the instant invention.

iv.) Secondary factors and objective evidence favors a finding that the present invention is nonobvious

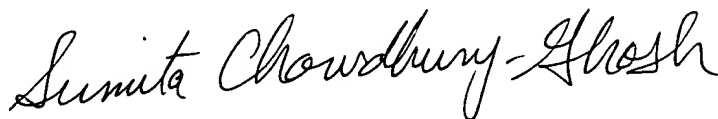
Also as stated above, objective evidence such as commercial success due to the merits of the invention, necessitates a conclusion that the invention is NOT obvious.

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Conclusion

For the reasons set forth above, Applicants respectfully submit that Claims 1 through 12 are patentable over Rodriguez *et al.* and Orii. Accordingly, Applicant prays that this Honorable Board will reverse the Primary Examiner's rejection of Claims 1-12.

Respectfully submitted,



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Dated: December 9, 2003

SCG

Appendix

Reprinted here below are the claims involved in this appeal:

1. A free-standing coil reel hold-down device, comprising:
 - a base plate operatively arranged to be secured to a floor;
 - a snubber arm pivotably mounted to said base plate and arranged for pivoting rotation about a pivot point, said snubber arm including a first section and a second section disposed at an obtuse angle with respect to one another; and,
 - a stand-alone means for effecting a pivoting movement of said snubber arm relative to said base plate.
2. The coil reel hold-down device recited in Claim 1 wherein said first section of said snubber arm is disposed proximate said base plate.
3. The coil reel hold-down device recited in Claim 2 further including a snubber device mounted to said second section of said snubber arm.
4. The coil reel hold-down device recited in Claim 3 wherein said snubber device comprises a wheel.

5. The coil reel hold-down device recited in Claim 3 wherein said snubber device comprises a roller.
6. The coil reel hold-down device recited in Claim 1 in which said means for effecting a pivoting movement of said snubber arm comprises a cylinder.
7. The coil reel hold-down device recited in Claim 6 wherein said cylinder is pneumatically controlled.
8. The coil reel hold-down device recited in Claim 6 wherein said cylinder is hydraulically controlled.
9. The coil reel hold-down device recited in Claim 1 wherein said obtuse angle is approximately 120 degrees.
10. The coil reel hold-down device recited in Claim 1 wherein said first section has a first length and said second section has a second length wherein said first length is approximately three times said second length.
11. The coil reel hold down device recited in Claim 1 wherein said obtuse angle is in a range of

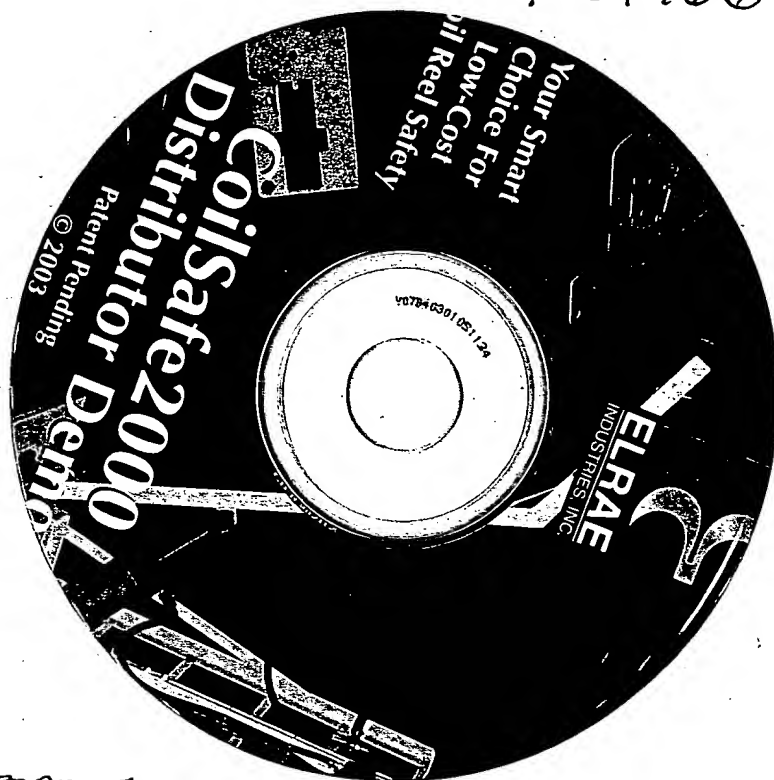
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about 100 to 130 degrees.

12. The coil reel hold down device recited in Claim 1 wherein said snubber arm is arranged to pivot about said pivot point through an angle in a range of approximately 25 to 40 degrees.

EXHIBIT 1

US PATENT APPLIC. NO. 09/954 766



ATTORNEY DOCKET NO: ELRP:101-US_